Appl. No. 10/799,120
Docket No.: D5053-00032
Reply to Office Action of May 13, 2005

REMARKS/ARGUMENTS

A PETITION FOR EXTENSION OF TIME has been filed, concurrently with this Amendment, extending the time for response to the Official Action one (1) month, from August 13, 2005, to September 13, 2005

As a result of this Amendment, claims 12-29 are under active consideration in the subject patent application.

In the Official Action, the Examiner has:

(1) acknowledged the claim for foreign priority, and stated that a copy of the foreign application has not been received;

(2) objected to claims 10 and 16 for various informalities;

(3) rejected claim 11 under 35 U.S.C § 112, second paragraph, for allegedly failing to point out and distinctly claim the subject matter;

(4) rejected claims 1, 3, and 6-8, under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 3,006,659, issued to Krasnoff et al.;

(5) rejected claims 1-3 and 6-8, under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 4,033,596, issued to Andorsen et al.;

(6) rejected claims 1-3, and 6-9 under 35 U.S.C. § 102(a) and 102(e) in view of WO 00/53276, filed by Rosso et al.;

(7) rejected claims 12-16 under 35 U.S.C. § 103(a) in view of U.S. Patent No. 4,033,596, issued to Andorsen et al.;

(8) rejected claims 12-17 and 19 under 35 U.S.C. § 103(a) in view of WO 00/53276, filed by Rosso et al.;

(9) rejected claims 10, 11, 18 and 20 under 35 U.S.C. § 103(a) in view of a proposed combination of WO 00/53276, filed by Rosso et al., with U.S. Patent No. 5,251,934, issued to Gates; and

(10) identified prior art made of record and not relied upon but considered pertinent to Applicant's disclosure.

With regard to Item 1, a copy of the International application, as filed, was provided in the parent U.S. application Serial No. 10/333,294, filed January 16, 2003. A copy of that document and its associated filing papers are enclosed with this amendment. Acknowledgment of the receipt of the same in the next official correspondence is requested.

With regard to Items 2-6, claims 1-11 have been canceled without prejudice to Applicant's right to pursue the subject matter of these claims in related applications. As a result, the basis for the rejections of claims 1-11 have been rendered moot.

In addition, claim 16 has been amended to attend to the informalities identified by the Examiner. New claims 21-29 have been added to set forth additional patentable aspects of Applicant's invention. Support for these new claims may be found throughout the specification, drawings, and claims as originally filed. No new matter has been introduced into the application as a result of the introduction of new claims 21-29.

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With regard to Item 7, Applicant traverses the Examiner's grounds for rejection, and requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) in view of U.S. Patent No. 4,033,596, issued to Andorsen et al. (the "Andeorsen reference") for the following reasons. Applicant provides an all-terrain board having leading and rear wheels, with a board disposed between the leading and rear wheels. The apparatus is arranged to be ridden by a rider standing with both feet on the board. The board comprises a brake means having a braking member arranged to be engaged and moved by pressure applied by a calf of a rearwardly disposed leg of a rider so as to apply braking force to at least one rear wheel of the apparatus. Advantageously, the braking member is upright having a lower end and an upper end, with the braking member extending upwardly from the frame and the lower end of the braking member being connected to the frame about a transverse pivotal mounting. The braking member extends upwardly in a free standing manner and the upper end is arranged, in use, to be only disengagably contacted on one side by a calf of a rearwardly disposed leg of a rider. The upright member is normally biased into a non-braking position, but is arranged to be moved to a braking position by pressure applied by contact by the calf of the rearwardly disposed leg of the rider so as to apply braking force to the rear wheel. The foregoing structure is wholly absent from the Andorsen reference alone or in any valid combination with the Krasnoff, Rosso or Gates references.

In order for a prima facie case of obviousness to be established, there must be some suggestion or motivation, either in the reference itself, or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, and the prior art reference must teach or suggest all of the claim limitations [emphasis add] (MPEP §2142). Andorsen fails to provide the requisite disclosure, suggestion, or motivation to support the Examiner's rejection of claims 12-16. Reconsideration is requested for the following reasons.

Andoesen et al., discloses roller skates where one foot only is attached to each skate, and each skate incorporates two rear wheels to provide stability. Thus, contarary to the Examiner's stated position that ". . *Andorsen et al. teaches a riding board. . .* " Andorsen's invention relates to a pair of roller skates not an individual board. Andorsen utilises a "lean back" approach to activate a brake, where each of the users legs leans back to brake. This is completely different from Applicant's invention, where just one of the users rear calves is required, i.e., in the present invention the rider uses one leg to operate one lever to bring the board to a stop. Andorsen requires leaning back on both legs to operate two levers and two braking means. The brake of Andorsen is friction based, operating directly onto the wheels without cables or more sophisticated braking equipment.

Moreover, Andorsen simply does not disclose a riding board at all. In fact, Andorsen only discloses a single foot device. Whether the reference does not

explicitly rule out the possibility of accommodating both feet of a user is not relevant to the establishment of a prima facia case of obviousness under 35 U.S.C. § 103(a), since a prior art reference relied upon as the basis of an obviousness rejection must teach or suggest all of the claim limitations. It is clear from the drawings of Andorsen that he never contemplates the use of both feet on a single skate, surely because his device is simply not large enough to accommodate both feet of a rider on one skate, and was never intended for that purpose. In fact, as pointed out by the Examiner relative to Andorsen's device, there is shown only a single foot binding which is described to be for the runner's shoes 17. The binding shown in Andorson's drawing is a right foot binding. Therefore, it can be assumed that there will be another roller skate with a binding suitable for the left foot of the operator. There is no teaching at all in Andorsen of the adaptation of his device to accommodate both of the user's feet as to an even more compact mono-steel snowboard type configuration, absent impermissible hindsight on the part of the Examiner. Accordingly, reconsideration and withdrawal of the Examiner's rejection of claims 12-16 under 35 U.S.C. §103 are requested.

With regard to Item 8, Applicant traverses the Examiner's grounds for rejection, and requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) in view of WO 00/53276, filed by Rosso et al. (the "Rosso reference") for the following reasons. The Rosso reference (like Andorsen) relates to roller skates of the type where one foot is placed in each of two skates

(see, Fig. 7 of Rosso). Here again, the Examiner is incorrect when proposing that "*Rosso et al. teach a riding board*" since Rosso relates to a pair of skates and not an individual board. Rosso's device is arranged to have a foot with a knee lever, where the foot of Rosso's skater is not firmly placed on a rigid deck. Rosso utilizes this known effect exactly since, in his device, it is necessary "...that a pivotal movement of the shoe-plate causes a pivotal movement of the fork...."

Rosso's disclosure depends upon the skater's foot and the fork/lever both tilting for the brake to operate. The brake lever means is tied to the user's knee (unlike Applicant's invention wherein pressure is applied by a calf of a rearwardly disposed leg of the rider). Furthermore, Rosso uses the "lean back" approach to activate a brake, each leg being leaned back, not just one rear calf as in the case of the present invention. Rosso requires both legs to operate two levers and two braking means.

The Examiner appears to be mistaken regarding the standard for obviousness when stating that the Rosso "*. . . reference is not expicitly limited from accommodating both feet of a user . . .*" since a prima facie case of obviousness requires some suggestion or motivation, either in the reference itself, or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. The fact that Rosso does not explicitly limit his disclosure has no bearing on this standard at all. There must be a suggestion or motivating disclosure to bring a person of ordinary skill to the structure advanced by the Examiner when relying upon this reference. Additionally, the prior art reference

must teach or suggest all of the claim limitations. Once again, there is no teaching, suggestion, or motivating disclosure within the four corners of Rosso of the adaptation of his device to accommodate both of the user's feet on a single board or the use of pressure applied by a calf of a rearwardly disposed leg of the rider, absent impermissible hindsight on the part of the Examiner.

Accordingly, reconsideration and withdrawal of the Examiner's rejection of claims 12-17 and 19 under 35 U.S.C. §103 are requested.

With regard to Item 9, the addition of the teachings of Gates to those of Rosso also fails to render the present invention obvious. The disclosures of Rosso and Gates (and for that matter Andorsen) all show braking systems for roller skates, i.e., a pair of devises that are fitted to each foot of the user. Rosso and Andorsen show "lean back" braking methods, a principle that has long been used and accepted as a braking technique on roller skates and roller blades as they are typically fitted with brake pads on the heel which make contact with the ground when a rider leans or tilts back. To brake a roller skate, the rider moves one foot/skate forward and another rearward (to provide stability) and then tilts back with one or both feet to apply the braking pad to the ground. Most importantly, there are two skates which can be orientated laterally and independently to provide stability when braking. Rosso and Andorsen have simply utilized more complex variations of this known lean-back braking action for roller skates. Neither reference even vaguely contemplates Applicant's

structure of a braking member arranged to be engaged and moved by pressure applied by a calf of a rearwardly disposed leg.

Gates discloses a pair of roller skates as well, with rim brakes operated by hand levers on the ends of flexible cables (see Fig. 1 of Gates). Gates simply has no relevance whatever to the present invention which provides an all-terrain board having leading and rear wheels, that is constructed to be ridden by a rider standing with both feet on the board. Moreover, and in stark contrast to the device taught by Gates, Applicant's braking member is upright having a lower end and an upper end, with the braking member extending upwardly from the frame and the lower end of the braking member being connected to the frame about a transverse pivotal mounting so that the braking member extends upwardly in a free standing manner and the upper end is arranged, in use, to be only disengagably contacted on one side by a calf of a rearwardly disposed leg of a rider. None of the foregoing structure is evenly vaguely suggested by Gates alone or in combination with the disclosure of Rosso.

With regard to Item 10, Applicant has considered the prior art references identified by the Examiner as pertinent and determined that none of them, taken alone, or in any valid combination with the Krasnoff, Andorsen, Rosso or Gates references anticipates or renders obvious the present invention. It should be noted that Krasnoff shows a very small foot operated mudguard style brake on a treadle scooter. Krasnoff does not disclose". . . *a braking member adapted for engagement with a lower leg* . . ." because Krasnoff himself states ". . . *the*

braking mechanism is actuated by merely pressing the outer curved plate with the foot to force the braking shoe against the periphery of the rear wheel . . . ." Thus, the brake described in Krasnoff is a friction brake operated by using a foot such that it would be impossible to operate it with a calf or lower leg. On a skateboard, as in the present invention, using the foot is impossible because the rider cannot lift a foot from the deck without losing balance. Thus the Krasnoff device does not appear to be intended for use with both feet of the user on the board member. In fact, because Krasnoff has a treadle arrangement this seems to be a most unlikely possibility. In any event this option does not appear to be disclosed. Krasnoff is more in the nature of a scooter where one foot is intended to engage with the ground while the other foot is on the board and presumably working the treadle arrangement.

Furthermore, Krasnoff's brake is structurally distinct from the brake of the present invention. It simply comprises a pivotally mounted upright member 122 which is connected to a bolt and nut assembly 124. A curved brake shoe is attached to the bolt and nut assembly 124 and is arranged to engage directly with a tire of a wheel when the curved plate 122 is activated. A spring 132 is arranged to return the curved plate 122 to its original position. None of the foregoing structure even vaguely suggests Applicant's braking member or its relationship to either the rider's foot/leg or the rear wheels.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

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If a telephone conference would be of assistance in advancing prosecution of the above-identified application, Applicant's undersigned Attorney invites the Examiner to telephone him at **215-979-1255**.

Respectfully submitted,

Dated: 9/13/05

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(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 January 2002 (24.01.2002)

PCT

(10) International Publication Number
WO 02/05911 A1

(51) International Patent Classification[7]: A63C 17/14, 17/06, B62L 1/02, 1/14

(21) International Application Number: PCT/AU01/00866

(22) International Filing Date: 17 July 2001 (17.07.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PQ 8837 18 July 2000 (18.07.2000) AU

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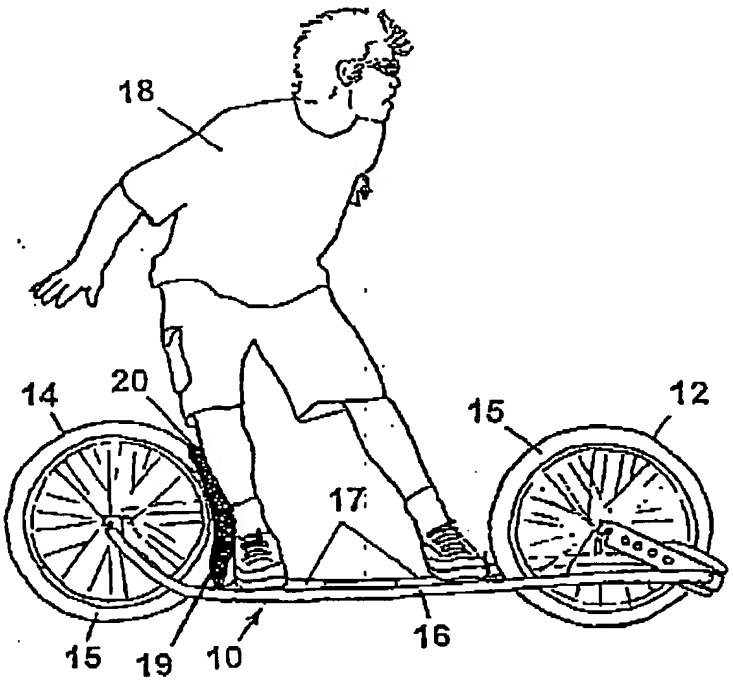
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian

[Continued on next page]

(54) Title: AN ALL-TERRAIN BOARD WITH LEG OPERATED BRAKE



(57) Abstract: An all-terrain board (10, 50) ridden by a rider (18) standing on the board (10, 50) is provided with a braking member which can be engaged by a leg of the rider (18) and moved into braking engagement with a wheel (14, 52). The braking engagement may be directly onto a tyre (15) of the wheel (14). Alternatively, the braking engagement may be indirectly onto a wheel (52) through a linkage connecting the brake (60) to a brake mechanism (74) acting on a rim (56) of the wheel (52).

WO 02/05911 A1

patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:
— *with international search report*

TITLE

AN ALL-TERRAIN BOARD WITH LEG OPERATED BRAKE

DESCRIPTION

The present invention relates to an all-terrain board.

FIELD OF THE INVENTION

The present invention is applicable in general to all-terrain boards arranged to be ridden by a rider standing on a board member such as skate boards, mountain boards, grass boards and similar devices which may have two, three or four wheels.

Braking systems for all-terrain boards have been described previously such as in International Patent Application No. PCT/AU98/01007.

However, there is a need for a braking system for all-terrain boards which enables braking to be effected in a way which is safe, convenient, effective, reliable and predictable.

The present invention provides an all-terrain board having a braking system which, at least in part, provides safe, convenient, effective, reliable and predictable braking under a range of conditions.

SUMMARY OF THE INVENTION

In accordance with one aspect of the present invention there is provided an all-terrain board arranged to be ridden by a rider standing on a board member, which comprises a

wheel means and a brake means having a braking member arranged to be engaged by a leg of a rider so as to apply braking force to the wheel means of the board.

In one embodiment of the present invention, the braking member may be arranged to act directly on a wheel of the board. In particular, the braking member may be arranged to act on a tyre of the wheel to impart braking force to the wheel.

In another embodiment of the present invention the braking member may act indirectly on a wheel of the board. In particular, the braking member may be arranged to cause a braking device to act on a rim of the wheel to impart braking force to the wheel

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will now be described, by way of example, with reference to the accompanying drawings, in which:-

Figure 1 is a side elevation of an all-terrain board in accordance with a first embodiment of the present invention;

Figure 2 is a view similar to Figure 1 showing a brake means being applied by a rider;

Figure 3 is a view of a rear portion of the all-terrain board of Figure 1 to an enlarged scale;

Figure 4 is a view similar to Figure 3 showing a brake means being applied;

Figure 5 is a side elevation of part of a rear portion of an all-terrain vehicle according to a second embodiment of the present invention showing a brake means;

Figure 6 is a side elevation similar to Figure 5 showing the brake means being applied to a wheel rim;

Figure 7 is a plan view of the second embodiment of Figure 5; and

Figure 8 is a plan view similar to Figure 7 showing the brake means being applied to a wheel rim.

DESCRIPTION OF THE INVENTION

In Figures 1 to 4 of the accompanying drawings, there is shown an all-terrain board 10 including a leading wheel 12, a rear wheel 14 and a frame 16 interconnecting the wheels 12 and 14. Each wheel 12 and 14 is provided with a tyre 15. Further, a board member 17 is mounted on the frame 16 between the wheels 12 and 14. The board 10 is provided with a brake means 19.

As shown in Figures 1 and 2 the all-terrain vehicle 10 is arranged to be ridden by a rider 18 standing on the board member 17.

As can best be seen in Figures 3 and 4 an upright braking member 20 of the brake means 19 extends upwardly from the frame 16. The braking member 20 is connected to the frame 16 of the board 10 about a transverse pivotal mounting 22 (see Figures 3 and 4). Further, the braking member 20 has a concave shape facing the tyre 15 of the rear wheel 14. Preferably, internally of the concave shape the brake member 20 is provided with a brake contact surface 24 which is formed of material having suitable wear and friction properties to withstand the pressure and temperature of braking against the tyre. Preferably, spring means (not shown) is provided to return the braking member 20 to the non-engaged position shown in Figure 3 when no force is applied to the braking member 20.

In use, the rider 18 rides the all-terrain board 10 in the manner shown in Figure 1. However, if the rider 18 decides to reduce the speed of the all-terrain board 10 when in motion he simply has to lean backward as shown in Figure 2. This prevents a rider 18 from being thrown forward when braking and is a natural, safe stance for a rider to maintain when an all-terrain board is slowing down. However, as can be seen in Figure 2, the arrangement of the present invention enables the rider 18 to apply pressure to the braking member 20 by means of the calf of his rearwardly disposed leg. This causes the braking member 20 to contact the tyre 15 of the rear wheel 14 by means of the brake contact surface 24. As a result a braking force is applied to the rear wheel 14 and the all-terrain board 10 is caused to slow down. The braking member 20 may be made of steel, aluminium, plastics material or composite material whilst the braking contact surface 24 may be formed of rubber, metal, composite material or suitable plastics material able to withstand the heat, pressure and friction created by braking against the tyre 15. In this regard, relatively low coefficient of friction plastic materials have been found to offer suitable performance for low cost.

In Figures 5 to 8 there is shown a portion of a rear part of an all-terrain vehicle 50 which is similar to that shown in Figures 1 to 4.

The vehicle 50 has a rear wheel 52 mounted on a frame 54. The wheel 52 has a rim 56 having a tyre 58 extending thereabout. The vehicle 50 is provided with a brake means 59.

A braking member 60 of the brake means 59 is mounted to the frame 54 by means of a transverse pivotal mounting 62. Further, as can best be seen in Figures 5 and 6, an upright plate member 64 is fixedly mounted to the frame 54 just in front of the mounting 62 of the braking member 60.

The plate member 64 has an aperture (not shown) therein through which projects a flexible cable 66. The cable 66 has a nipple 68 mounted at outer end thereof adjacent to

the plate member 64. The nipple 68 is larger than the aperture in the plate member 64 so that the outer end of the cable 66 cannot pass through the aperture.

The cable 66 then passes through a conduit 70 which may include a length adjustment means 72.

As can be seen in Figures 7 and 8, the cable 66 is connected to a bicycle type V-brake 74. The V-brake 74 has a pair of arms 76 pivotally mounted on pivot points 78 and extending forwardly thereof. The conduit 70 is connected to a leading end of a first arm 76 via a swivel cage 82 pivoting off a leading end of one arm 76. The cable 66 exits the conduit 70 at one end of the cage 82 and extends across to a cable clamping screw 84 at a leading end of the other arm 76. Further, forwardly of but adjacent to the pivot points 78 each arm 76 is provided with a brake pad 80.

As can be seen in the drawings, in operation, a rider as shown in Figure 2, applies pressure to the braking member 60 by means of the calf of a rearwardly disposed leg and pivots the braking member 60 about the pivot 62 so as to move the braking member 60 away from the nipple 68 and therefore shorten the effective length of the cable 66 between the leading ends of the arms 76. This causes these leading ends to be drawn towards each other about the pivot points 78 and therefore causes the brake pads 80 to engage with the rim 56. This action applies braking force to the wheel 52 and therefore slows down the all-terrain vehicle 50 when it is in motion.

Each pair of brake arms 76 incorporates internal spring means for returning the arms 76 to the position shown in figure 7 when braking is no longer required and pressure ceases to be applied to the braking member 60.

V Brakes have been used as the example to describe the braking means. However, it is important to note that the principle of a rider leaning against a calf operated lever to activate a cable or hydraulic operated brake also applies to other types of braking mechanisms such as disk brakes and hub brakes.

Modifications and variations such as would be apparent to a skilled addressee are deemed within the scope of the present invention.

CLAIMS

1. An all-terrain board arranged to be ridden by a rider standing on a board member characterised in that it comprises a wheel means and a brake means having a braking member arranged to be engaged and moved by a leg of a rider so as to apply braking force to the wheel means of the board.

2. An all-terrain board according to Claim 1, characterised in that the braking member is arranged to be engaged by a calf of the rider.

3. An all-terrain board according to Claims 1 or 2, characterised in that the board has a leading wheel means and a rear wheel means and the braking member is arranged to engage with the rear wheel means.

4. An all-terrain board according to any one of the preceding Claims, characterised in that the braking member is arranged to act directly on a wheel of the board.

5. An all-terrain vehicle according to claim 4, characterised in that the braking member is a pivotally mounted upright member which is normally biased away from the wheel but can be pivoted into engagement with the wheel by contact with the leg of the rider.

6. An all-terrain board according to any one of Claims 1 to 3, characterised in that the braking member acts indirectly on a wheel of the board.

7. An all-terrain board according to Claim 6, characterised in that the braking member acts indirectly on a rim of the wheel of the board.

8. An all-terrain board according to Claim 6 or 7, characterised in that the braking member is a pivotally mounted upright member which is normally biased away from the

wheel but which can be pivoted into engagement with the wheel by contact with the leg of the rider.

9. An all-terrain board according to Claim 8, characterised in that a fixed upright plate is disposed adjacent to but forwardly of the braking member, and a flexible cable means is anchored on the fixed upright plate, the cable means is operationally connected to the braking member so that as the braking member is moved the cable means causes braking force to be applied to the wheel.

10. An all-terrain vehicle according to Claim 9, characterised in that the cable is operationally connected to a brake having opposed brake pad members and movable arms, the movable arms being moved by the cable means upon movement of the brake member so that the brake pads engage with the wheel and apply braking force thereto.

FIGURE 1

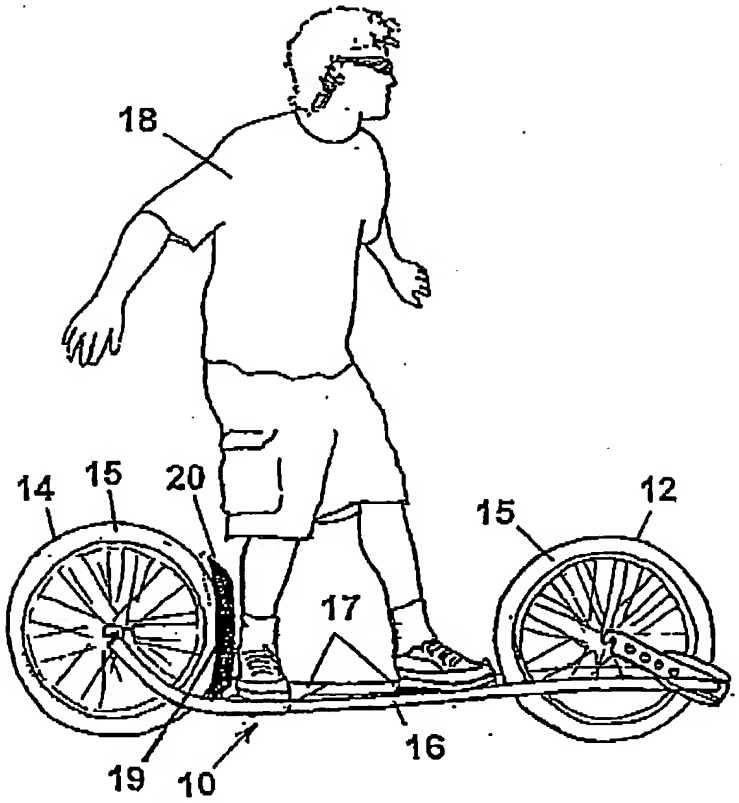


FIGURE 2

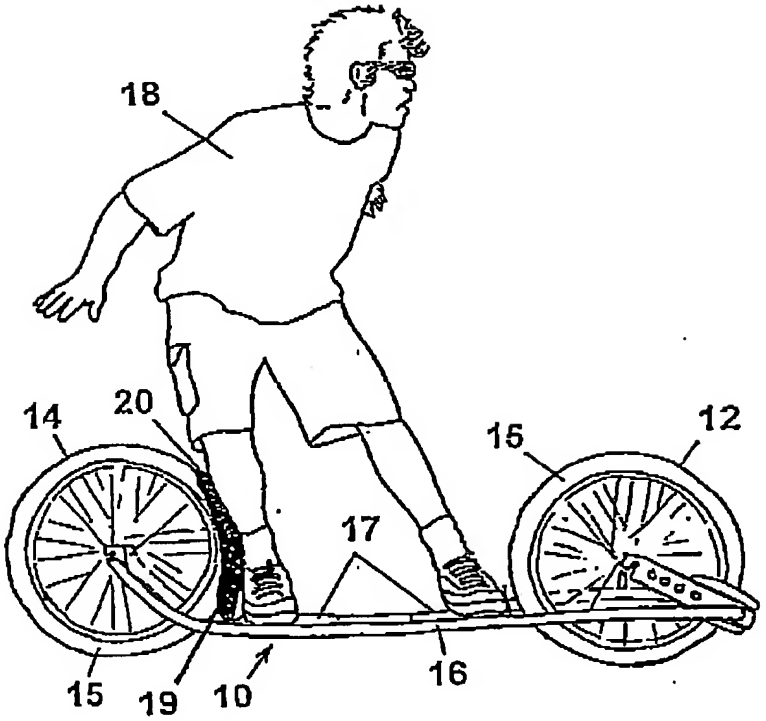


FIGURE 3

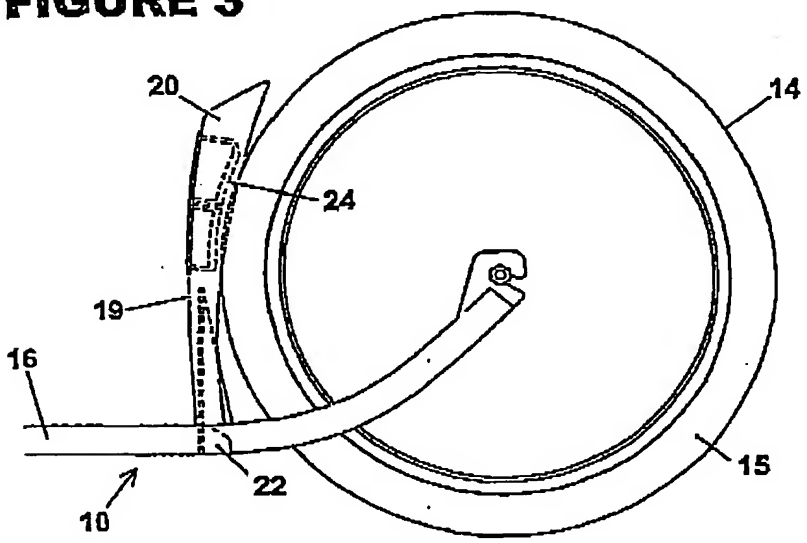


FIGURE 4

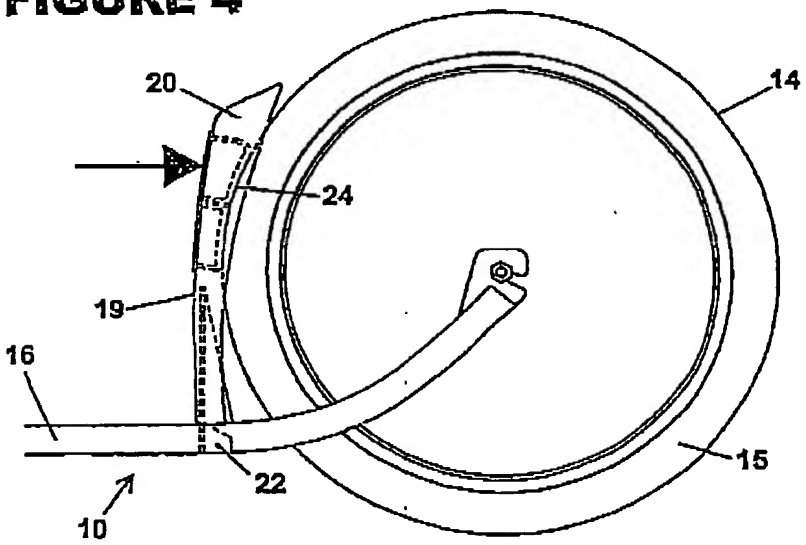


FIGURE 5

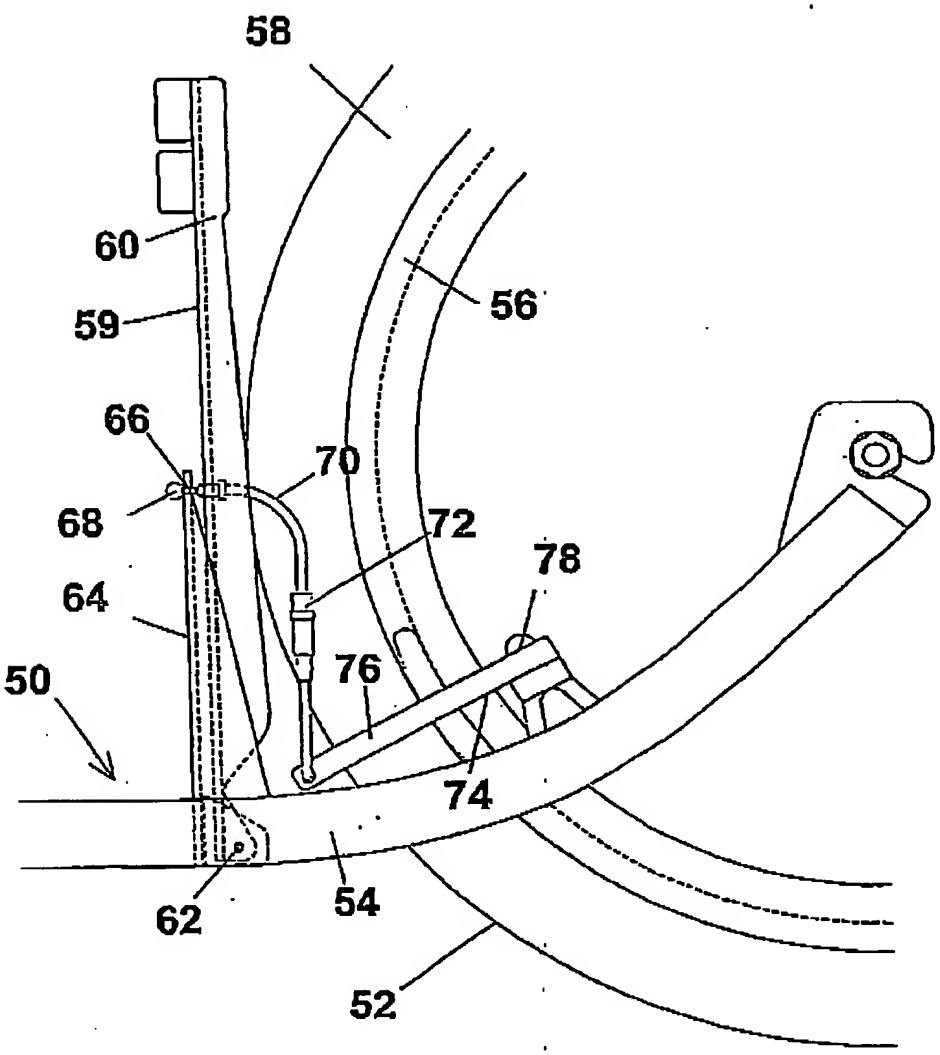


FIGURE 6

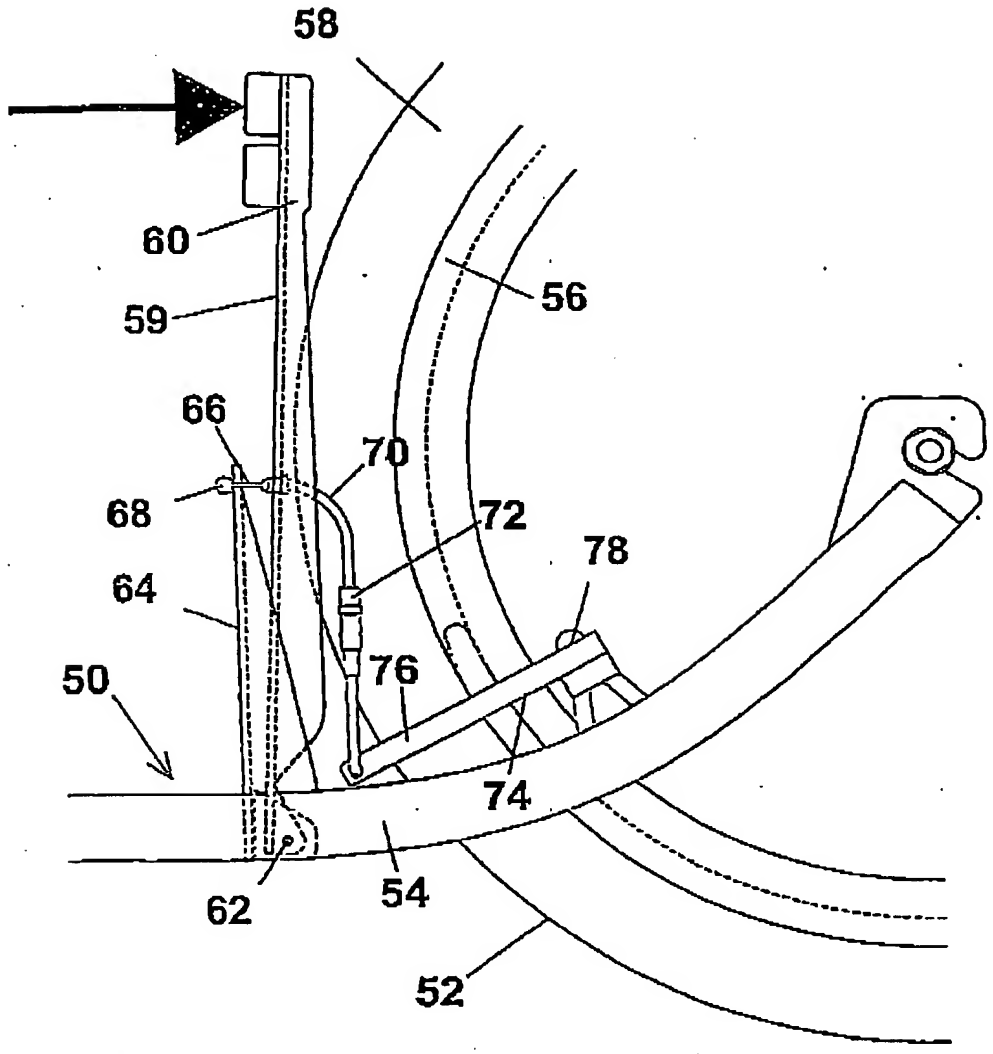


FIGURE 7

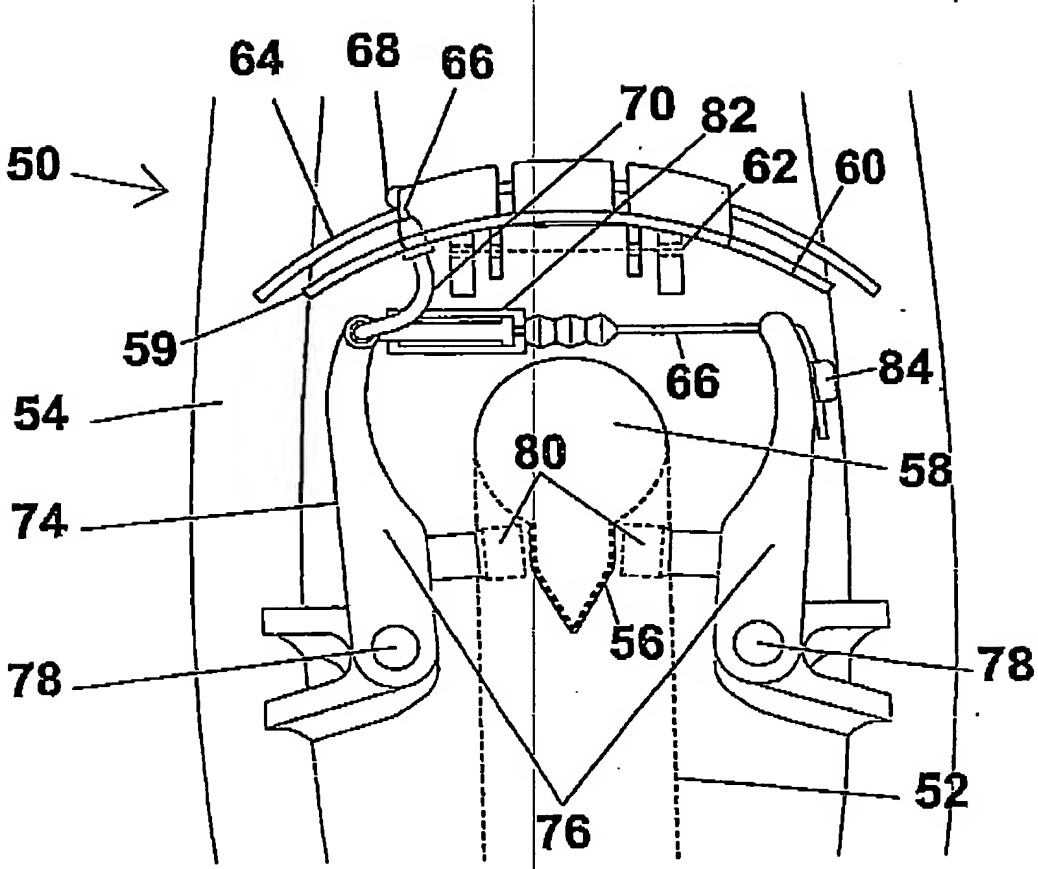
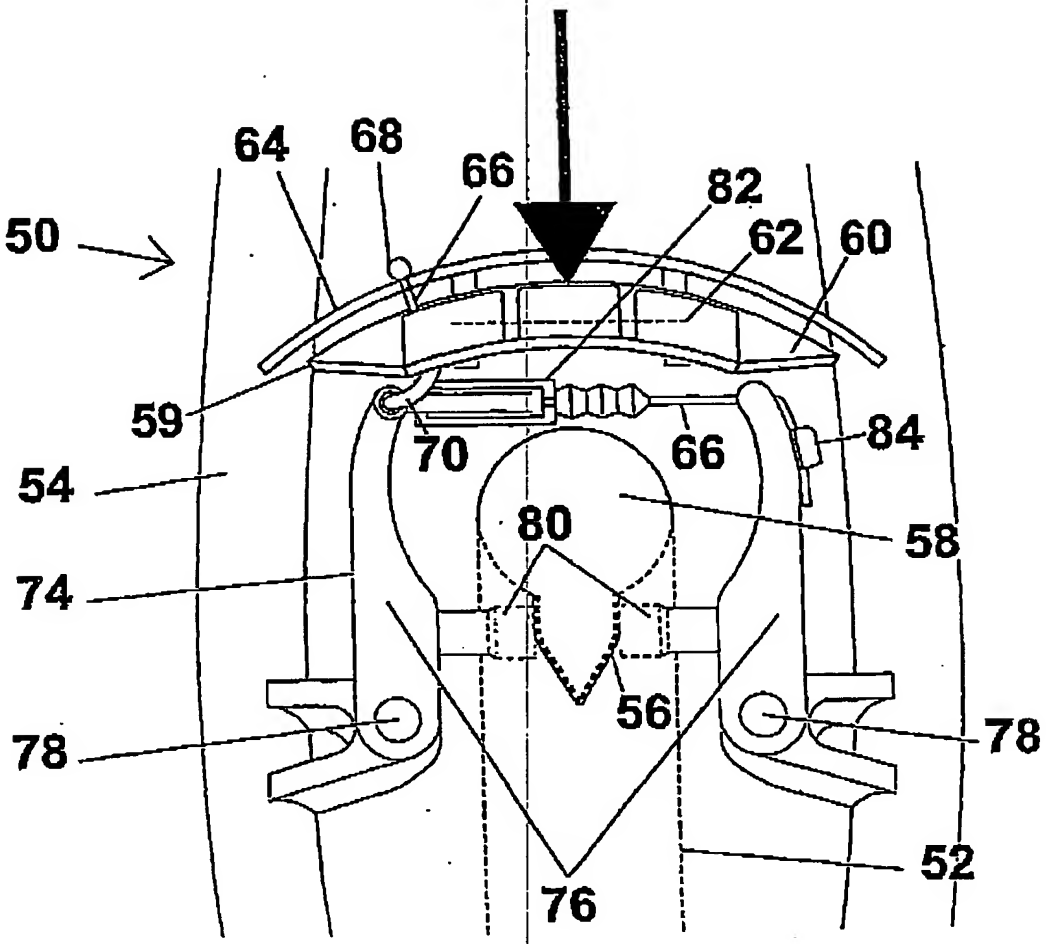


FIGURE 8



COMBINED DECLARATION AND POWER OF ATTORNEY

(PATENT - ORIGINAL, DESIGN, NATIONAL STAGE OF PCT)

As a below named inventor, I hereby declare that:

TYPE OF DECLARATION

This declaration is of the following type: (check one applicable item below)

[ ] Original

[ ] Design

[X] National stage of PCT

INVENTORSHIP DECLARATION

My residence, post office address and citizenship are as stated below next to my name, I believe I am the original, first and sole inventor *(if only one name is listed below)* or an original, first and joint inventor *(if plural names are listed below)* of the subject matter which is claimed and for which a patent is sought on the invention entitled: AN ALL-TERRAIN BOARD

SPECIFICATION IDENTIFICATION

the specification of which:

[X] is attached hereto.

[ ] was filed on _____ as Serial No. _____
and was amended on _____ *(if applicable)*.

NOTE: *Amendments filed after the original papers are deposited with the PTO which contain new matter are not accorded a filing date by being referred to in the declaration. Accordingly, the amendments involved are those filed with the application papers or, in the case of a supplemental declaration, are those amendments claiming matter not encompassed in the original statement of invention or claims. See 37 CFR 1.67.*

[X] was described and claimed in PCT International Application No. PCT/AU01/00866 filed on 17/JULY/2001; and as amended under PCT Article 19 on _____ *(if any)*.

ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the Office all known information which is material to patentability as defined in Title 37, Code of Federal Regulations. § 1.56.

[ ] In compliance with this duty there is attached an information disclosure statement. 37 CFR 1.97.

PRIORITY CLAIM

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate or

of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

☐ no such applications have been filed

☒ such applications have been filed as follows.

NOTE:Where item (c) is entered above and the International Application which designated the U.S. claimed priority check item (e), enter the details below and make the priority claim.

EARLIEST FOREIGN APPLICATION(S), IF ANY FILED WITHIN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

Country	Application Number	Date of Filing	Priority Claimed under 37 U.S.C. 119
AUSTRALIA	PQ8837	18/07/2000	X Yes __No
INTERNATIONAL	PCT/01/00866	17/07/2001	X Yes __No
			__ Yes __No

ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

_____

_____

_____

POWER OF ATTORNEY

As a named inventor, I hereby appoint the following registered practitioners to prosecute this application and transact all business in the Patent and Trademark Office connected therewith: customer no. 08933

Lewis F. Gould, Jr., Registration No. 25,057; William H. Murray, Registration No. 27,218; Stephan P. Gribok, Registration No. 29,643; Peter J. Cronk, Registration No. 32,021; Robert E. Rosenthal, Registration No. 33,450; Richard A. Paikoff, Registration No. 34,892; Samuel W. Apicelli, Registration No. 36,427; Steven E. Koffs, Registration No. 37,163; N. Stephen Kinsella, Registration No. 37,657; Darius C. Gambino, Registration No. 41,472; and,

Please direct all correspondence to: Lewis F. Gould, Jr., Esq.

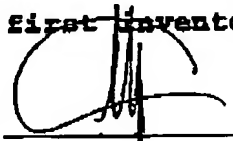
DUANE, MORRIS & HECKSCHER LLP
One Liberty Place

DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the application or any patent issued thereon.

SIGNATURE(S)

Full name of sole or first inventor, if any Graeme Scott Attey

Inventor's signature 

Date 14TH JANUARY, 2003 Country of Citizenship Australia

Residence 8 Nelson Street, South Fremantle, Western Australia 6162 Australia

Post Office Address PO Box 1441, Fremantle, Western Australia 6959 Australia

Attorney Docket No: 283702-5

PHS\603197.1

INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU01/00866

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. [7]: A63C 17/14, 17/06, B62L 1/02, 1/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
REFER ELECTRONIC DATA BASE CONSULTED BELOW

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
AU: IPC A63C 17/00, 17/01, 17/06, 17/14

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
DWPI IPC A63C 17/00, 17/01, 17/06, 17/14, B62L 1/-, 3/-, B60T 1/00, 1/02, 1/04, 1/06 & keywords: BOARD, SCOOTER, BRAKE, LEG, CALF, CYCLE and similar terms

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 00/53276 A (ROSSO) 14 September 2000 See whole document	1-3, 6-8
X	AU 84429/75 A (ANDORSEN et al) 10 March 1977 See whole document	1-8
Y	See whole document	1, 9, 10
Y	WO 99/34886 A (DESIGN SCIENCE PTY LTD) 15 July 1999 See whole document - prior art skateboard cited in the present specification	1

[X] Further documents are listed in the continuation of Box C [X] See patent family annex

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search
19 September 2001

Date of mailing of the international search report
25 SEPTEMBER 2001

Name and mailing address of the ISA/AU
AUSTRALIAN PATENT OFFICE
PO BOX 200, WODEN ACT 2606, AUSTRALIA
E-mail address: pct@ipaustralia.gov.au
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Authorized officer
ADRIANO GIACOBETTI
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Form PCT/ISA/210 (second sheet) (July 1998)

INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU01/00866

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 891921 A2 (SHIMANO INC.) 20 January 1999 See whole document - Calliper operated brake	9, 10

Form PCT/ISA/210 (continuation of Box C) (July 1998)

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/AU01/00866

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member					
WO	200053276	AU	200025684				
AU	84429/75	NONE					
WO	9934886	AU	17435/99	EP	1042039		
EP	891921	PL	327528	SK	948/98	US	5894913

END OF ANNEX

PCT

REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

International Application No.

International Filing Date

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference *(if desired) (12 characters maximum)*

Box No. I TITLE OF INVENTION

AN ALL-TERRAIN BOARD

Box No. II APPLICANT ☐ This person is also inventor

Name and address: *(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)*

DESIGN SCIENCE PTY LTD
8 Nelson Street
SOUTH FREMANTLE
WESTERN AUSTRALIA 6162
AUSTRALIA

Telephone No. (08) 9336 2017
Facsimile No. (08) 9336 7665
Teleprinter No.
Applicant's registration No. with the Office

State *(that is, country)* of nationality: AUSTRALIA

State *(that is, country)* of residence: AUSTRALIA

This person is applicant for the purposes of: ☐ all designated States ☒ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

Name and address: *(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)*

ATTEY, Graeme Scott
8 Nelson Street
South Fremantle
Western Australia 6162
AUSTRALIA

This person is:
☐ applicant only
☒ applicant and inventor
☐ inventor only *(If this check-box is marked, do not fill in below.)*

Applicant's registration No. with the Office

State *(that is, country)* of nationality: AUSTRALIA

State *(that is, country)* of residence: AUSTRALIA

This person is applicant for the purposes of: ☐ all designated States ☐ all designated States except the United States of America ☒ the United States of America only ☐ the States indicated in the Supplemental Box

☐ Further applicants and/or (further) inventors are indicated on a continuation sheet.

Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as: ☒ agent ☐ common representative

Name and address: *(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)*

LORD, Kelvin Ernest
LORD & COMPANY
4 Douro Place
West Perth
Western Australia 6005
AUSTRALIA

Telephone No. (08) 9481 1309
Facsimile No. (08) 9481 4705
Teleprinter No.
Agent's registration No. with the Office

☐ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

Sheet No. 2

Box No.V DESIGNATION OF STATES *Mark the applicable check-boxes below; at least one must be marked.*

The following designations are hereby made under Rule 4.9(a):

Regional Patent

- ☒ AP ARIPO Patent: GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, MZ Mozambique, SD Sudan, SL Sierra Leone, SZ Swaziland, TZ United Republic of Tanzania, UG Uganda, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT
- ☒ EA Eurasian Patent: AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT
- ☒ EP European Patent: AT Austria, BE Belgium, CH & LI Switzerland and Liechtenstein, CY Cyprus, DE Germany, DK Denmark, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, TR Turkey, and any other State which is a Contracting State of the European Patent Convention and of the PCT
- ☒ OA OAPI Patent: BF Burkina Faso, BJ Benin, CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, GA Gabon, GN Guinea, GW Guinea-Bissau, ML Mali, MR Mauritania, NE Niger, SN Senegal, TD Chad, TG Togo, and any other State which is a member State of OAPI and a Contracting State of the PCT *(if other kind of protection or treatment desired, specify on dotted line)* .....

National Patent *(if other kind of protection or treatment desired, specify on dotted line)*:

- ☒ AE United Arab Emirates
- ☒ AG Antigua and Barbuda
- ☒ AL Albania
- ☒ AM Armenia
- ☒ AT Austria
- ☒ AU Australia
- ☒ AZ Azerbaijan
- ☒ BA Bosnia and Herzegovina
- ☒ BB Barbados
- ☒ BG Bulgaria
- ☒ BR Brazil
- ☒ BY Belarus
- ☒ BZ Belize
- ☒ CA Canada
- ☒ CH & LI Switzerland and Liechtenstein
- ☒ CN China
- ☒ CO Colombia
- ☒ CR Costa Rica
- ☒ CU Cuba
- ☒ CZ Czech Republic
- ☒ DE Germany
- ☒ DK Denmark
- ☒ DM Dominica
- ☒ DZ Algeria
- ☒ EE Estonia
- ☒ ES Spain
- ☒ FI Finland
- ☒ GB United Kingdom
- ☒ GD Grenada
- ☒ GE Georgia
- ☒ GH Ghana
- ☒ GM Gambia
- ☒ HR Croatia
- ☒ HU Hungary
- ☒ ID Indonesia
- ☒ IL Israel
- ☒ IN India
- ☒ IS Iceland
- ☒ JP Japan
- ☒ KE Kenya
- ☒ KG Kyrgyzstan
- ☒ KP Democratic People's Republic of Korea
- ☒ KR Republic of Korea
- ☒ KZ Kazakhstan
- ☒ LC Saint Lucia
- ☒ LK Sri Lanka
- ☒ LR Liberia
- ☒ LS Lesotho
- ☒ LT Lithuania
- ☒ LU Luxembourg
- ☒ LV Latvia
- ☒ MA Morocco
- ☒ MD Republic of Moldova
- ☒ MG Madagascar
- ☒ MK The former Yugoslav Republic of Macedonia
- ☒ MN Mongolia
- ☒ MW Malawi
- ☒ MX Mexico
- ☒ MZ Mozambique
- ☒ NO Norway
- ☒ NZ New Zealand
- ☒ PL Poland
- ☒ PT Portugal
- ☒ RO Romania
- ☒ RU Russian Federation
- ☒ SD Sudan
- ☒ SE Sweden
- ☒ SG Singapore
- ☒ SI Slovenia
- ☒ SK Slovakia
- ☒ SL Sierra Leone
- ☒ TJ Tajikistan
- ☒ TM Turkmenistan
- ☒ TR Turkey
- ☒ TT Trinidad and Tobago
- ☒ TZ United Republic of Tanzania
- ☒ UA Ukraine
- ☒ UG Uganda
- ☒ US United States of America
- ☒ UZ Uzbekistan
- ☒ VN Viet Nam
- ☒ YU Yugoslavia
- ☒ ZA South Africa
- ☒ ZW Zimbabwe

Check-boxes below reserved for designating States which have become party to the PCT after issuance of this sheet:

☐ ..... ☐ ..... ☐ .....
☐ ..... ☐ ..... ☐ .....

Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. *(Confirmation (including fees) must reach the receiving Office within the 15-month time limit.)*

Box No. VI PRIORITY CLAIM

The priority of the following earlier application(s) is hereby claimed:

Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is: national application: country	regional application:* regional Office	international application: receiving Office
item (1) 18/07/00	PQ8837	Australia		
item (2)				
item (3)				
item (4)				
item (5)				

☐ Further priority claims are indicated in the Supplemental Box.

The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) *(only if the earlier application was filed with the Office which for the purposes of this international application is the receiving Office)* identified above as:

☐ all items ☒ item (1) ☐ item (2) ☐ item (3) ☐ item (4) ☐ item (5) ☐ other, see Supplemental Box

* *Where the earlier application is an ARIPO application, indicate at least one country party to the Paris Convention for the Protection of Industrial Property or one Member of the World Trade Organization for which that earlier application was filed (Rule 4.10(b)(ii)):* ....

Box No. VII INTERNATIONAL SEARCHING AUTHORITY

Choice of International Searching Authority (ISA) *(if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):*

ISA / .....

Request to use results of earlier search; reference to that search *(if an earlier search has been carried out by or requested from the International Searching Authority):*

Date *(day/month/year)* Number Country *(or regional Office)*

Box No. VIII DECLARATIONS

The following declarations are contained in Boxes Nos. VIII (i) to (v) *(mark the applicable check-boxes below and indicate in the right column the number of each type of declaration)*: Number of declarations

☐ Box No. VIII (i)	Declaration as to the identity of the inventor	:
☐ Box No. VIII (ii)	Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent	:
☐ Box No. VIII (iii)	Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application	:
☐ Box No. VIII (iv)	Declaration of inventorship (only for the purposes of the designation of the United States of America)	:
☐ Box No. VIII (v)	Declaration as to non-prejudicial disclosures or exceptions to lack of novelty	:

Sheet No. ...4...

Box No. IX CHECK LIST; LANGUAGE OF FILING

This international application contains:

(a) the following number of sheets in paper form:

request (including declaration sheets)	:	4
description (excluding sequence listing part)	:	6
claims	:	2
abstract	:	1
drawings	:	7
Sub-total number of sheets	:	20
sequence listing part of description *(actual number of sheets if filed in paper form, whether or not also filed in computer readable form; see (b) below)*	:	0
Total number of sheets	:	20

(b) sequence listing part of description filed in computer readable form

(i) ☐ only (under Section 801(a)(i))

(ii) ☐ in addition to being filed in paper form (under Section 801(a)(ii))

Type and number of carriers (diskette, CD-ROM, CD-R or other) on which the sequence listing part is contained *(additional copies to be indicated under item 9(ii), in right column)*: .....

This international application is accompanied by the following item(s) *(mark the applicable check-boxes below and indicate in right column the number of each item)*: — Number of items

1. ☒ fee calculation sheet :
2. ☐ original separate power of attorney :
3. ☐ original general power of attorney :
4. ☐ copy of general power of attorney; reference number, if any: ..... :
5. ☐ statement explaining lack of signature :
6. ☐ priority document(s) identified in Box No. VI as item(s): ..... :
7. ☐ translation of international application into *(language)*: ..... :
8. ☐ separate indications concerning deposited microorganism or other biological material :
9. ☐ sequence listing in computer readable form (indicate also type and number of carriers (diskette, CD-ROM, CD-R or other))
   (i) ☐ copy submitted for the purposes of international search under Rule 13*ter* only (and not as part of the international application) :
   (ii) ☐ *(only where check-box (b)(i) or (b)(ii) is marked in left column)* additional copies including, where applicable, the copy for the purposes of international search under Rule 13*ter* :
   (iii) ☐ together with relevant statement as to the identity of the copy or copies with the sequence listing part mentioned in left column :
10. ☐ other *(specify)*: ..... :

Figure of the drawings which should accompany the abstract: 2

Language of filing of the international application: English

Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).

DESIGN SCIENCE PTY LTD
ATTEY, Graeme Scott
Managing Director

ATTEY, Graeme Scott

For receiving Office use only

1. Date of actual receipt of the purported international application:
2. Drawings: ☐ received: ☐ not received:
3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:
4. Date of timely receipt of the required corrections under PCT Article 11(2):
5. International Searching Authority (if two or more are competent): ISA /
6. ☐ Transmittal of search copy delayed until search fee is paid

For International Bureau use only

Date of receipt of the record copy by the International Bureau:

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